



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id  
**MANITOU MI30 FL6497**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL 10W40 (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HPL0004568	---	---
Sample Date		Client Info		07 Feb 2024	---	---
Machine Age	hrs	Client Info		196	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	53	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	7	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	57	---	---
Tin	ppm	ASTM D5185m	>15	4	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

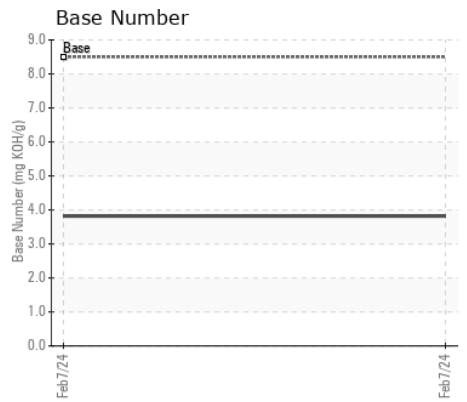
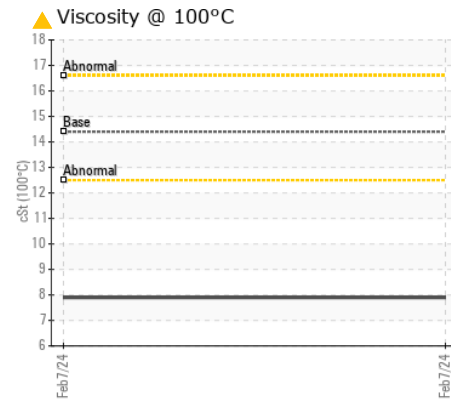
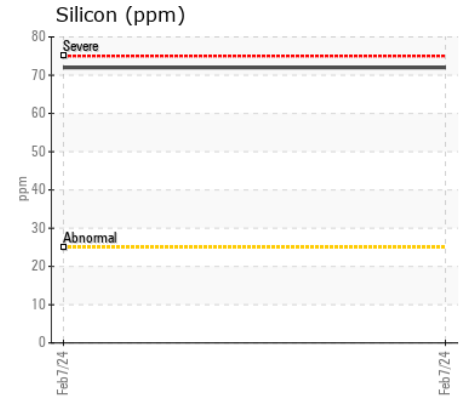
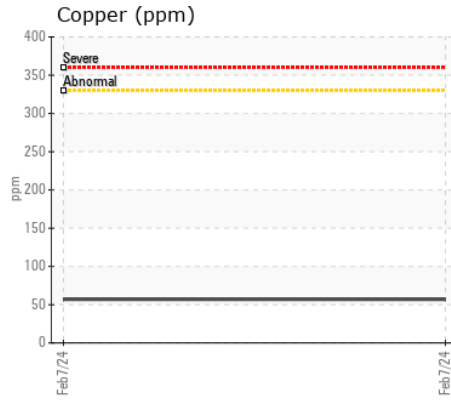
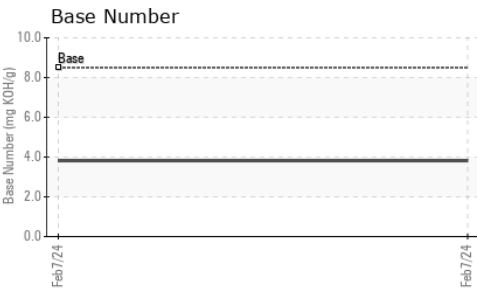
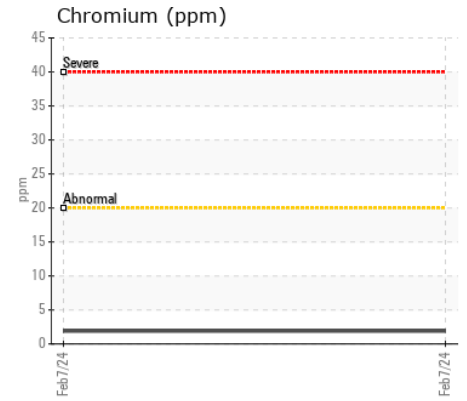
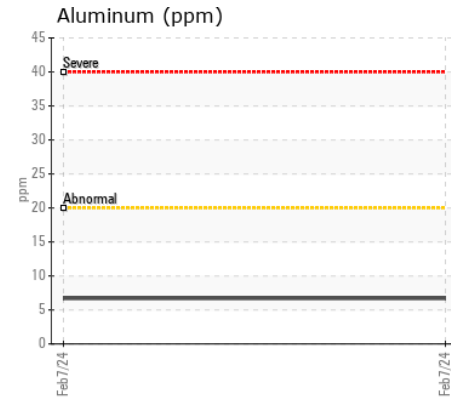
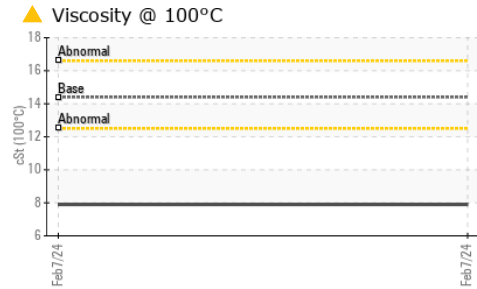
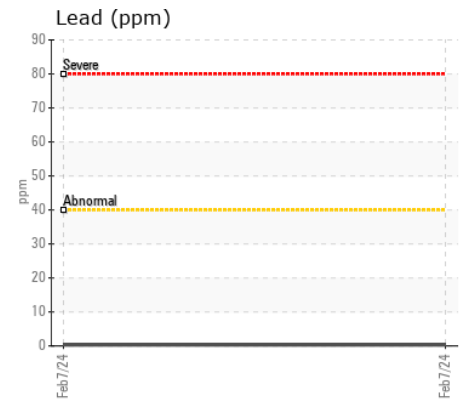
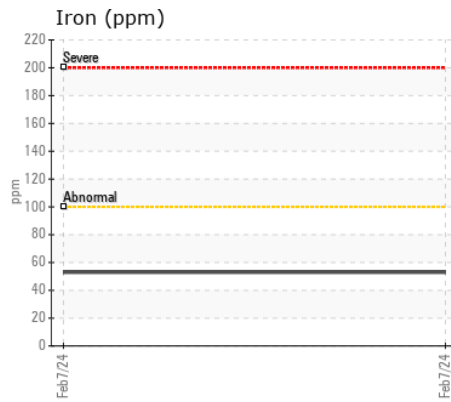
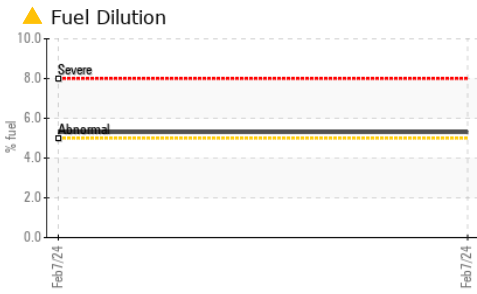
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	72	---	---
Potassium	ppm	ASTM D5185m	>20	10	---	---
Fuel	%	ASTM D3524	>5	▲ 5.3	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		7	---	---
Boron	ppm	ASTM D5185m	250	0	---	---
Barium	ppm	ASTM D5185m	10	2	---	---
Molybdenum	ppm	ASTM D5185m	100	74	---	---
Manganese	ppm	ASTM D5185m		5	---	---
Magnesium	ppm	ASTM D5185m	450	30	---	---
Calcium	ppm	ASTM D5185m	3000	1289	---	---
Phosphorus	ppm	ASTM D5185m	1150	651	---	---
Zinc	ppm	ASTM D5185m	1350	843	---	---
Sulfur	ppm	ASTM D5185m	4250	7477	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.6	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.82	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 7.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : HPL0004568 Received : 09 Feb 2024  
 Lab Number : 06085450 Tested : 14 Feb 2024  
 Unique Number : 10872895 Diagnosed : 14 Feb 2024 - Wes Davis  
 Test Package : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**STEVENS ON CRANE**  
 410 STEVENSON DR  
 BOLINGBROOK, IL  
 US 60440

Contact: DAVE KOEHNE  
 davidk@stevensoncrane.com

T: (630)972-9199

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: